## Main document

# “I didn’t used to have much friends”: Exploring the friendship concepts and capabilities of a boy with autism and severe learning disabilities.


### ABSTRACT

While progress has been made in understanding the friendships of children with autism, research on the friendships of children with additional learning disabilities remains extremely limited. In this research, a qualitative case study approach provided a rich description of the friendship concepts and capabilities of Ben, a ten year old boy with autism and severe learning disabilities within the context of a mainstream primary classroom in the United Kingdom. An innovative activity based strategy was used to gain Ben’s own perspectives in relation to friendship. Findings revealed that Ben exhibited a strong desire to have friends, believed himself to have some, demonstrated some understanding in respect of degrees of friendship, and displayed a commitment to friendships over relatively long periods of time. Methodological, developmental and capacity perspectives informed the discussion, with a case being made both for a greater focus on the friendship capabilities of children with autism and learning disabilities and their more direct inclusion in the research process.


## Accessible summary

- This paper looks at the friendships of Ben, (not his real name), a ten year old boy with autism and learning disabilities, in his mainstream school.
- Ben was able to name his friends and showed that he understood some important things about friendship.
- Adults in the school said that Ben was very keen to have friends and that some of his friendships had lasted for over a year.
- The study focused on the importance of listening to children with autism and learning disabilities and on the need to highlight their social strengths.


**Keywords**: friendship, learning disability, peer relationships, mainstream school

Friendships are seen as extremely important for the long term well-being of children, serving as social, emotional and cognitive resources for the individual, (Dunn, 2004), especially in situations which require joint functioning (Hurley - Geffner, 1995). They can improve attitudes to school, reduce the sense of social isolation and the likelihood of being bullied (Hodges, Boivin, Vitaro and Bukowski, 1999). This is an important consideration for children with autism spectrum disorder (ASD) who are reported to experience bullying more than other typically developing children or children with learning disabilities (Blood, Blood, Coniglio, Finke and Boyle, 2013; Cappadocia, Weiss and Pepler, 2012).

Bauminger et al., (2008) defined friendship as:

> ‘‘stable, frequent, and interconnected affective interactions that are manifested by certain classes of behavioural markers (e.g., sharing, play and conversational skills) that facilitate the functions of companionships, intimacy, and closeness’’ (p. 136)

A developmental progression has been identified, where friendship in children up to the age of 8 is generally based on concrete factors, such as shared interests, while as children grow older, empathic understanding and intimate exchanges become more important (Berke, 1994; Mussen, Janeway, Kagan and Huston, 1990; Rutter and Rutter, 1992). Primary aged school children have been found to form friendships almost exclusively with members of their own sex (Boyd and Bee, 2013; Harwood, Miller and Vasta, 2008) while the nature of friendships shows gender differences over time. Towards middle childhood, girls develop more supportive types of friendships, whilst boys tend to adopt more adversarial relationships where interactions are more curtailed and geared towards achieving status (Rose and Rudolph, 2006).

Given the significant and lasting difficulties which children with autism experience in relation to the development of social skills (American Psychiatric Association, 2013), the development of friendships requiring the use of a range of complex social skills has been found to be challenging (Bauminger and Kasar, 2000; Chamberlain, Kasari, & Rotheram - Fuller, 2007; Fuentes et al., 2012). In particular, difficulties with the ability to empathise which characterises the social impairments of people with

autism (Baron-Cohen, 1995; McDonald and Messinger, 2012) create major obstacles in the formation and maintenance of friendships. The problems people with autism experience in understanding notions of friendship have been frequently highlighted (Hobson, 1993; Humphrey and Lewis, 2008; Kasari, Locke, Gulsrud and Rotheram-Fuller, 2011) together with the distress which a lack of friends may cause (Howard, Cohn and Orsmond, 2006; Kilman and Negri-Shoultz, 1987; Wing, 1992), most significantly including a heightened sense of loneliness (Causton-Theoharis, Ashby and Cosier, 2009; Laasgard, Nielsen, Eriksen and Goossens, 2010; Locke, Ishijima, Kasari, and London, 2010). Furthermore, lack of friendships has been associated with depression in adolescents and adults with autism (Mazurek, 2013; Penny, 2013).

Despite the difficulties which individuals with autism experience in making friends, several studies have shown that many have been successful in doing so. Calder, Hill and Pellicano (2012) noted that some good progress has been made in recent years towards understanding the friendships of children with autism in mainstream schools, the social context where most close friendships in childhood are made (Adler and Adler, 1998; Witkow and Fuligni, 2010). Although children with ASD have been found to have fewer friends than typically developing children (Bauminger et al., 2008) most children with autism across several studies reported having at least one (Kuo, Orsmond, Cohn and Coster, 2013). Some researchers have found that the friendships of children with ASD are of shorter duration that those of typically developing children (Bauminger and Shulman 2003) while others have reported friendships lasting for periods of between three and six years (Rossetti, 2011).

A limited number of qualitative studies have been undertaken which provide a deeper understanding of the understanding and experience of friendship in adolescents with autism. Daniel and Billingsley (2010) reported that six out of seven boys with ASD and good verbal communication found the establishment of friendships to be the most difficult aspect, revealing that problems in making friends initially included anxieties about being the one who initiated the contact, a concern regarding interfering with school based hierarchies and worries relating to being seen as a nuisance. Carrington, Templeton and Papinczak (2003) attempted to

explore concepts of friendship in teenagers with Asperger syndrome, finding a general lack of “in-depth discussion” (p.213) of matters relating to friendship.

Such advances in knowledge notwithstanding, a recent systematic review of the literature on friendship in children with autism, conducted by Petrina, Neysha, Carter, & Stephenson (2014) reported that the current body of research is “highly unrepresentative of children with ASD as a whole”, (p. 121) in its focus on children of average or above average intelligence. A need is identified for further research across different intellectual levels. Furthermore, few studies have attempted to examine whether relationships identified as such by children with autism actually include components of friendships (Webster and Carter, 2013) as they have most often been defined, such as a sense of intimacy and commitment. It is these twin omissions in the literature which the current study seeks to address.

## The current study

The purpose of this study was to explore the friendship concepts and abilities of Ben (pseudonym), a child with autism and severe learning disabilities in the context of a mainstream school in the UK. The research was qualitative in nature, aiming to achieve a richer understanding of the peer relationships of the child concerned within the everyday context in which they had been developed. The objectives of the study were

- To explore Ben’s experience of friendship in his everyday school environment
- To explore his perceptions of friendship
- To explore dimensions of Ben’s friendships

## Research design

In their meta-analysis of friendship and children with autism, Petrina et al., (2014) commented on the lack of methodological variety in this area, with most of the 24 studies reviewed relying on quantitative data gained through the use of a variety of friendship scales. Such a narrow use of methods, they concluded, necessarily limits

the scope and nature of inquiries. Bolte (2014) argued that for research in areas where a “deeper understanding of certain human processes” (p.67) is required, there is a need for more qualitative studies and the study of friendship amongst children with autism and severe learning disabilities, seems to constitute one such area.

In this study, a multi-method qualitative case study design was employed in an attempt to capture as holistic and detailed a picture as possible of Ben’s friendship relationships within his everyday school environment.

Yin (2013) defined a "case study" as

> "an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between the phenomenon and the context are not clearly evident; and in which multiple sources of evidence are used".
>
> (P. xxx)

Cohen and Manion (2011) noted that case study research provides “a unique example of real people in real situations” (p.289) and argued that a particular strength of the approach is that it observes “effects in real contexts, recognizing that context is a powerful determinant of both causes and effects” (ibid). It has been argued that case studies are especially useful in developing knowledge and understanding in areas where data cannot easily be gathered through other types of research design (Bryman, 2012).

## Participants

Ben (pseudonym) was a ten year old, at the time of the study, with a diagnosis of autism and severe learning disabilities. He understood simple everyday conversation and was able to converse in well-formed phrases. Ben could read short sentences and was able to recognise some numerals. Ben was familiar with the researcher, prior to the data collection period and this was perceived as important in avoiding the anxiety which an unfamiliar adult might have produced.

## Methods

A range of qualitative methods were adopted, comprising both participant and non-participant observations, diaries and semi-structured interviews. Specifically, ten non-participant observations of approximately 15 minutes each were undertaken in the school playground, to gain a greater understanding of the everyday experience of Ben's friendship relationships. These were necessarily at a distance resulting in descriptions of behaviours, expressions and sequences of interactions but not records of actual conversations. A dictaphone of running commentaries was used to record these events. Three semi-structured interviews took place, two with school staff and one with Ben's mother to provide a more holistic and ecologically sound perspective. Diaries of any comments made about "friends" were kept by both Ben's mother and his designated classroom assistant, in an effort to capture his own perceptions.

Attempting to gain Ben's own perspectives was considered especially important. James, Jenks and Prout (1998) in their discussion of a new 'social studies of childhood' called for "children to be understood as social actors shaping as well as shaped by their circumstances" (p.6) and emphasized the need to gain their perspectives directly to achieve a more valid and in-depth understanding of their lived experiences. Despite such developments, there is a paucity of research seeking to gain the views of children with disabilities (Stalker and Connors, 2002; Franklin and Sloper, 2009) and especially in relation to those with learning disabilities (Beresford, 1997; Boyden, Muniz and Laxton - Kane, 2013; Rabiee, Sloper and Beresford, 2005). Very few studies in the field of autism have sought to gain the views of children with autism and learning disabilities on any issue, possibly due to the nature of the methodological challenges likely to be encountered, as discussed by Preece and Jordan, (2009) in their study of the views of children with autism on social care support.

Teachman and Gibson (2013) discussed the use of a range of effective and practical approaches to including children with learning disabilities in the research process. In particular, they observed that practices should be "reflective of individual children's experiences, interests, values and everyday routines…" (p.265). Such an orientation

would seem especially important in relation to children with autism, given their strong need for routine and predictability.

In this study, an activity designed to be familiar, unchallenging and enjoyable was undertaken with Ben by the researcher to facilitate a conversation about friends and friendship. Specifically, the session consisted of Ben taking photographs of children he identified as his friends with an instamatic camera and in a second session sticking them into a scrapbook. All Ben's comments were recorded during the activity in the form of field notes by the researcher.

## Ethical Considerations

The study was given internal ethical approval by an HE institution in the UK. All adult participants were approached for consent and were informed about rights to confidentiality and anonymity, in line with British Psychological Society Guidelines. Issues of meaningful consent were far more complex and problematic for Ben, as a child with autism and severe learning disabilities.

Before Ben's consent could be gained, there was the important issue concerning the nature of the "cover story" to be given to the child participants in the study to be resolved, that is the information they would be given regarding the nature and goals of the research. Glesne and Peshkin (1992) argued that cover stories are essentially "verbal or written presentations about yourself" (P. 31), going on to state:

> "Different interactions with your participants require different introductions of varying levels of detail. You tell the same basic points to everyone, but what else you tell certain individuals depends on the circumstances".
> (P.32)

Considerable doubts were experienced regarding the information to be given to Ben, in particular, about the nature of the research. The dilemma was that at one level, it

seemed that an explicit and truthful account of the exact nature of the research should be given, to avoid the uncomfortable position of Ben being merely the passive object of a research process that he knew little about. However, at another, children's obvious lack of knowledge about the meaning and process of research is acknowledged as a major difficulty in the literature (Fine and Sandstrom, 1988), with Ben's comprehension being further compromised by the linguistic and cognitive difficulties he experienced as a result of his autism.

Finally, I decided to opt for what Fine and Sandstrom (1988) term "shallow cover", "noticeable for its sin of omission" (P. 19). "Shallow cover" is where researchers give an account of their presence which is explicit in a general way, whilst omitting the detailed focus of the research. I opted to tell both Ben and his classmates that I had been finding out what happened in schools and that I would like to come to their school to see what happened in their classroom. I felt that this explanation was in many ways the most appropriate and ethical, given that a major consideration for me was to avoid the highlighting of differences between Ben and his classmates, for the sake of his own emotional well-being and for fear of affecting the nature of his social experiences at school. This "sin of omission" appeared to represent the most ethical balance achievable in the circumstances although reaching this conclusion proved difficult and illustrated the significant moral dilemmas involved for the researcher at every stage, in attempting to include a child with autism and learning disabilities in the research process.

Having decided upon the research narrative for Ben and his classmates, the next major ethical decision was how to approach Ben himself to gain meaningful consent or assent, as it is often referred to in relation to children. Lambert and Glacken, (2011, p.787) discuss the nature of the distinction between the two concepts:

> "Assent recognizes that while children might be unable to give legally valid consent for themselves, it is important to involve them as much as possible in the decision about whether they would like to participate, or not, in the

research. Asserting children's assent addresses the principles of autonomy and beneficence".

In the search for assent, I was particularly mindful of the documented difficulties which many children with autism have in the area of decision making (Jordan and Powell, 1995) and anxiety in relation to communication in general (Preece and Jordan, 2009). Ultimately, I decided to approach Ben's mother to try to ascertain an accurate impression of his feelings regarding my possible visit to his school. I reasoned that as a result of her in-depth awareness of his emotional responses and patterns of behaviour, she would be far better placed than I, to obtain an accurate impression of his response to my suggestion. A few days after my initial phone call about the research and its purpose, Ben's mother asserted that Ben seemed "fine about it". I spoke to Ben myself by telephone at that point and asked if it would be all right if I came to spend some time in his classroom to see what happened there. He replied "yes" and "are you coming in a few days?" He seemed relaxed and enthusiastic during the phone call, from which I reasoned that, at that moment, at least, he was comfortable about my forthcoming visit to his school. However, I was concerned that this issue of assent should be on-going, as identified as best practice in research with children (Alderson, 2005). Therefore, throughout my time at the school, I was careful to observe Ben's reaction to my presence, watching for any signs of stress. No such signs were observed and Ben's mother was able to reassure me that his behaviour at home during the data collection period betrayed no increased levels of anxiety.

## Data analysis

All face-to-face interviews were transcribed and summaries were sent to each participant as a means of checking the trustworthiness of the data (Robson, 2011). Field notes form the tape recorded commentaries on the playground were transcribed, as well as participant observation and diary data.

A computer assisted qualitative data analysis software (CADQAS) package was employed for analysis. The package provides for the coding of data at a number of conceptual levels. *First level coding categories* can be further refined by the use of *second level categories* and so on. Within each level, *nodes* are created at which

data is stored during analysis. Additionally, the package allows for the storing of *memos* at individual nodes where appropriate. This proved to be an invaluable facility, enabling the easy documentation of relevant queries and thoughts on data as analysis progressed. The package provides statistical data on the number of units coded at a particular node as a percentage of all text units coded. In this way, some notion of the strength of the data in terms of frequency can be obtained.

The CAQDAS package supports the use of a grounded theory approach to data analysis (Strauss and Corbin, 1990) consisting of three stages. At stage one, general themes were coded, for example: dimensions of friendship. During the second stage of coding, different subthemes for each general theme were identified, for example with reference to commitment and content of interactions. Themes were identified as representative according to the frequency of their appearance within the data. At the third stage of analysis, quotations were identified as representative from each second-order theme to provide illustrative examples of the views of participants.

# Findings

Two key areas of interest emerged during analysis, each containing a number of subthemes. The first related to Ben’s capabilities in the area of friendship and the second to aspects of his conceptual understanding of it and these are discussed below.

## Ben’s perspectives on friendship

As stated previously, it was considered essential to gain Ben’s own perspectives on friendship and an activity based approach was adopted, in line with Teachman and Gibson's (2013) suggestions for including children with learning disabilities in the research process. Few studies have attempted to include the direct perspectives of children with autism on friendship and none, as far as we know, have reported the perspectives of children with autism and additional learning disabilities.

### Having friends

Ben very much enjoyed the photo activity session designed to illuminate his understanding of friendship and facilitate conversation on that subject, commenting

at one point: “This is good”. Such positive engagement was considered important both from an ethical standpoint and since it could be seen, of itself, as an indication of Ben’s interest in the subject of friends.

During the activity, Ben was quickly able to name a group of 8 friends, six girls and two boys. The ability to name friends demonstrates that he did possess at least some understanding of what a friend is. Although other studies have explored friendship nomination in able, adolescent children with autism, as far as we are aware, none has done so in relation to younger children with autism and learning disabilities, possibly due to the methodological challenges identified by Petrina et al., (2014).

Webster and Carter (2013) noted that the consideration of friendships in typically developing children and children with disabilities has generally centred on the “nomination” of a friend, with subsequent research assuming that the nomination reflects an actual friendship. They suggest that while this may be a reasonable deduction in relation to typically developing children, it may be less so for children with disabilities, whose concepts of friendships may differ. Interestingly, there was significant overlap between children whom Ben identified as his friends in the photo activity and those whom key adults named during their interviews. This is significant given the absence of studies exploring whether individuals with ASD would identify the same people as their friends, as their parents or caregivers would (Kuo et al., 2013). Agreement regarding friendship nomination between children with autism and their caregivers is assumed to add further grounds for assuming that a friendship does exist. Moreover, those children identified by Ben as friends were largely the same group of children with whom he was observed to interact with during playground observations.

**Understanding of changes in friendship**

Within the same activity, Ben also showed himself able to reflect on some abstract aspects of his relationships, when he commented:

> "... I didn't used to have much friends when I first came to Westbury [fictional place] ".

Such a reflective comment from a child with autism and learning disabilities is noteworthy and relatively rare in the literature (Petrina et al., 2014). It indicates Ben's ability to think in relatively nuanced ways about a complex social concept, by comparing his social experiences with regard to friends, over time. The comment also revealed that Ben possessed some means of construing friendship in order to be able to recognise the distinction between a time when he "didn't have much friends" and the present time, when he believed that he did. The reflection also sheds some light on what children with ASD may be able to understand in respect of peer relationships, and as such is important in helping to develop our understanding of their social capacities, as well as difficulties.

Ben also made the following comment during the structured scrapbook activity, as we talked about children he had known at his previous schools, mentioning one boy in particular, David (pseudonym), reflecting:

> "David used to be good friends with me…he's not anymore. why did he *used* to be good friends with me?"

This query indicates Ben's awareness that friendship is not a static thing: it is possible to lose friends. The question also seems to indicate a concern regarding the loss of a child he perceived as a "good friend" and again appears illustrative of the importance which Ben placed on friends and of his ability to think in relatively complex ways about changes in the nature of friendships.

The fact that this question could be raised in relation to a former friend, not at Ben's current school, demonstrates the usefulness of a practical, open-ended and interactive methodological approach which allows for non-directed spaces in the conversation in which children can contribute their own perceptions more freely (Teachman and Gibson, 2013).

**Degrees of friendship**

It seems that Ben also had some awareness in relation to degrees of friendship. As he looked at the photos of his named friends, taken during the structured photo activity, he commented:

> "I haven't got a best friend out of these"

Interestingly, during an interview, a key adult at school reported:

> "...it just really bothers him the fact that he doesn't have a best friend"

This again indicates some level of understanding of the possible qualitative differences between types of friendship and a desire to have “a best friend”, whatever such a term might mean for Ben. Kuo et al., (2011) reported that adolescents with ASD were able to name their closest friends but did not explore what the notion of “closest” might mean for those young people concerned. Further exploration of the notion of “best friends” for children with autism would add to our knowledge of their qualitative understanding of peer relationships.

Although few in number, the direct quotations from Ben about “friends” included above, are nevertheless considered compelling data since, when contextualised, they provide some illuminating insights into his developing understanding of a concept which must necessarily be complex for a child with autism and additional learning disabilities. The success of the informal and interactive nature of the activity in which these comments were made, evidenced by Ben’s own keen participation, testifies to the importance of placing children’s own interests at the centre of research approaches with children with disabilities.

## Adult perspectives

### *Desire for friendship*

Calder et al., (2012) found that the social motivation of able children with autism emerged as a significant factor in parent and teacher reports determining the nature and extent of children’s friendships. In this study, it was clear that Ben, a child with additional learning disabilities also demonstrated such a motivation. In interviews, key school staff school reflected on his desire for friends and how to make them:

> "...he wants to know what friends talk about and how you get friends" (Class teacher).

Another member of school staff commented:

> "he's very keen to have friends, very keen..." (Classroom assistant).

Diary and observational data further testified to his desire for friends and engaging in friendly interactions. For example, Ben's classroom assistant said:

> "I mean I am the biggest dragon is his life, he just wants to be with them (other children)."

### *Differential behaviour in relation to friends*

In an attempt to clarify the nature of Ben's friendships, school staff were asked to reflect on differential aspects of his social behaviour in relation to other children. It has been suggested that children are more emotionally expressive with their friends, talking, laughing and looking at each other more than non-friends, (Berke, 1994; Vasta, Haith and Miller, 1992). Having been told by all adults interviewed that Ben had very distinct preferences for some children over others, it seemed important to discover if his behaviour was in any way differentiated when interacting with preferred children and non-preferred children. The following question was asked in an attempt to elicit such information:

> "...If you're actually watching him, how do you know that these are the children that he's friendly with...what is it about his behaviour, perhaps that tells you that he's more interested in this child than another?"

One reply was as follows:

> "Because he just constantly talks to them and...even if he's engrossed in doing something, he'll answer them.....but if anybody else who isn't really in what he classes as his circle, [talks to him], then he doesn't really bother with them..." (Classroom assistant).

A different participant, stated:

> "...Well, he talks much more...it's just his face, he smiles, he laughs..." (Class teacher).

One definition of friendship is of social relationships preferentially sought out (Rutter and Rutter, 1992). There can be little doubt from the data that Ben does indeed

discriminate between children, interacting in different ways according to whether he perceives them to be in his "circle" or not.

### *Changes in the nature of peer relationships*

A major theme to emerge from the data was the extent to which Ben has made progress in his peer and friendship relationships at the mainstream primary school over the two year period since his arrival. His classroom assistant commented on the change:

> "Absolutely fantastic, ...the integration on the playground is wonderful...I mean he actually goes up to children now and he'll initiate conversation - I mean he would never have done that before he'd go up and shout at them...I mean he actually gives a bit more space and will start a conversation...Originally, when he first came, the children very much directed their games to match Ben, I mean whatever he was into they'd play, now they still do that but you can see him talking about other wider issues, things that before he might not have been interested in, and I think that's part of his development that he's become aware that all children don't like what he's interested in and he's had to learn that..." (Classroom assistant).

Playground observational data is also revealing on this point. CP noted:

> "Ben is talking and laughing with the other children...I am very much struck by how naturally he is interacting with [them]".

Ben's mother commented on the development of his friendship with Vanessa (pseudonym), a girl with severe learning disabilities whom he had known at his previous school, in terms of what he would now talk about with her. When describing Ben's telephone conversations with Vanessa, she said that:

> "...it used to be always 'what have you had for dinner, Vanessa?' but we're getting away from that into more normal conversations..."

Such developments in peer relationships are significant in the context of the development of friendships and show how one child with autism and severe learning

disabilities developed in his understanding of what kind of initiations and responses are important in developing relationships with peers. In brief, strategies used by the mainstream school to facilitate such understanding included a range of approaches at the levels of the institution, the class and the individual.

## Dimensions of friendship

As noted above, few studies of children with autism have attempted to examine whether identified friendships actually include elements of what have traditionally been described as components of friendships (Webster and Carter, 2013). Hinde (1979) identified a number of friendship dimensions, as follows: *content, diversity, qualities, reciprocity, patterns, intimacy, and commitment.* This framework continues to be seen as illuminating with regard to exploring aspects of friendship (for example, see Blair et al., 2014 and Rabaglietti, Vacirca, Zucchetti and Ciairano, 2012).

Two of these dimensions, namely *content and commitment* are reported on here, as shedding particular light on aspects of Ben's relationships with his friends.

**Content dimension**

Hinde (1979) defined 'content' as *what individuals do with one another during social contact* (Hinde, 1979). In respect of this research, the question becomes:

> "What does Ben do with his friends and can this tell us anything about the nature of his friendships?"

A theme which emerged strongly during data collection was Ben's increasingly apparent preference for interaction with girls rather than boys. All adults interviewed referred to this. Ben's classroom assistant reported that Ben was commonly heard to say:

> " 'I don't want to play with him - he's a boy' ".

Another commented that Ben:

> "...relates to girls much more than boys"

A third adult was asked if there were any children Ben preferred to be with, she replied:

> "Mainly the girls..."

Data analysed from non-participant playground observations revealed that Ben did engage in many more interactions with girls than boys. Statistical data from the CADQAS programme showed that text units coded at the node *interactions with girls* constituted 4.4% of all units coded, whilst units coded at the node *interactions with boys* made up only 0.5%.

Possible explanations for this began to emerge using the concept of *content* as a lens through which to view the data. When questioned regarding possible reasons for Ben's preference for interaction with girls, adults interviewed referred to the differences between what boys and girls do at playtimes. For example, one respondent commented:

> "...I think I've come to the conclusion that maybe because the girls do more of the things he likes - that perhaps that's why, you know, because he likes pink and that kind of thing and the fact that the girls bother with him more than the boys do because they play football and he's not interested in that..." (Classroom assistant).

Another adult replying to a question relating to Ben's preference for socialising with girls said:

> "...I don't know whether it's because he sees that girls are more fun to be with...or that they will do more what he wants them to do, maybe the boys get bored more quickly..they're just wanting to be on the playground, rough and tumbling about..." (Class teacher).

During a taped commentary, made during one playtime, it was noted that there were a large number of boys playing football and in addition, that there were *only* boys playing football. Interestingly, those boys whom Ben did name as friends, during the interactive photo activity, were said *not* to be "sporty types" by a key adult.

Ben's choice of social partners, therefore, is perceived by key adults to be influenced, at least to some extent, by the nature of the activities in which these children engage. Smith (1994) commented on aspects of sex differences among children, asserting that segregation on playgrounds becomes much more common after age 6-7 years. Girls generally play in pairs and engage in more sedentary activities, whilst boys prefer more outdoor games and later team games. Research undertaken with a mixed group of 10-11 year olds which revealed that girls of this age placed more emphasis on intimacy and exclusiveness in friendships, while boys enjoyed playing competitive games which were more complex in their rules and general structure, (Smith, 1994).

Such findings may have implications for the content dimension of friendship under discussion here. Some characteristics of particular activities may have effects on Ben's response to them. For example, a fast moving game, with many players and complex rules, such as football, present significant challenges for a child with autism (Miltenberger and Charlop, 2014; Obrusnikova and Dillon, 2011). Therefore, the reported inclination of girls to socialise in dyads at age 10-12 may provide an easier social setting for such a child who is possibly more likely to be able to engage in interactions in a small group, more static situation.

A developmental perspective on how friendship changes as children mature may afford another perspective on this ‘content’ dimension. Adults who know Ben well have suggested that his choice of friends seems, at least partly, to depend on what they do. It is, therefore, possible to speculate that such friendship based on common activities could indicate that Ben may be operating at the "reward-cost" stage of friendship development, identified by Bigelow (1977). In other words, that his concept of friendship may be at an earlier stage of development than his chronological age. Given the limitations of the current study, such a hypothesis must remain speculative but would seem to merit further investigation.

***Commitment dimension***

The second of Hinde's friendship dimensions to emerge as a theme during analysis, was that of commitment, that is the *stability of relationships over time*. The duration

of friendships reveals something of their nature, although, it may illuminate little regarding the actual *quality* of these relationships.

There is clear evidence that some of Ben's attachments to peers have lasted for considerable lengths of time. By the time of the study, one of Ben's peer relationships with a girl called “Vanessa”, whom he met at his previous school, had lasted for over three years. During the interactive photo activity, Ben commented:

> "I still am friendly with Vanessa".

With regard to his attachments at his current school, it was apparent that some attachments had similarly lasted for longer than six months, a period considered important in identifying friends (Solomon, Bauminger and Rogers, 2011). Notes from the classroom assistant’s diary, recorded that:

> "After lunch, Lottie was not in the room and [Ben] began to be upset, he explained that he liked to know where she was..Lottie came back shortly and he joined in with the usual P.E."

There were several other recorded references to Ben's attachment to this child during the previous year and during data collection, Ben included Lottie on his list of friends, and indeed all adults interviewed felt that Ben was still friendly with this child.

When one respondent was asked if Ben's friendships had remained constant throughout the current school year, she replied:

> "Yes, there's one or two who have dropped off and have come back but really it's been the same core of Susan and Lottie (pseudonyms)"

Ben has obviously sustained constant attachments over relatively long periods although it is unclear how the qualitative aspects of these longer term relationships may have altered.

The use of two aspects of Hinde's (1979) dimensional framework to explore aspects of Ben’s friendships has revealed some interesting perspectives. It appears that the nature of activities in which other children engage, may have influenced his

gravitation towards certain children. Moreover, Ben's commitment to friendships over time has been demonstrated, both with one child who attends his previous school, as well as with children in his current class.

## Discussion

Literature in the field of friendship and children with autism has indicated the need for greater research across different intellectual levels (Petrina et al., 2014) and this study expands our knowledge here by increasing our understanding of the friendship capabilities and concepts of a child with autism and severe learning disabilities, using a qualitative case study design. This study has shown that Ben's peer relationships in general, had developed significantly in the context of his mainstream primary school. Of particular note here, however, was the nature of his friendship relationships and aspects of his own understanding of these.

Quotations from Ben himself, although limited in quantity, nevertheless illuminated important aspects of his understanding of friendship, such as its presence or absence ("I didn't used to have much friends when I first came to Westbury") and the existence of degrees of friendship ("I haven't got a best friend out of these" while looking at photos of identified friends). His evident enthusiasm for the interactive photo scrapbook activity could also be said to demonstrate a high level of interest in friendships, with key adults testifying to his strong motivation to have friends.

It is argued here that the collection of qualitative data directly from children with autism is not only important in placing their voices at the centre of any research concerning them, it is also more likely to shed light on their social capabilities and understandings within their everyday environments.

The use of aspects of Hinde's (1979) analytical framework to explore key components of friendship shed some interesting light on aspects of Ben's friendship capabilities. In respect of the 'content' component, that is what individuals do during social contact, it was found that Ben chose to be friendly mostly with girls, believed by key adults to result from a preference for what girls did, especially on the playground. From a developmental perspective, there is a tentative implication here that Ben could have been operating at the reward-cost stage of friendship

development which is based on sharing concrete activities (Bigelow, 1977), and is common in typically developing children up to 8 years of age (Smith, 1994).

In relation to commitment, the study found that Ben had maintained friendly relationships with some children over relatively long periods of time. Within his mainstream class, friendships with some girls were reported as having lasted for over a year, while a friendship with a girl with severe learning disabilities had lasted for in excess of three years. Small numbers of other qualitative studies have found similar patterns of on-going friendship relationships in older children with autism who were more able (Daniel and Billingsley, 2010; Rossetti, 2011).

With regard to methodology, studies by Carrington et al., (2003) and Preece and Jordan (2008) both reported difficulties in gathering the views of able children with autism through direct interview approaches. The use in this study of a familiar, unchallenging and preferred activity to elicit Ben's own perspectives proved effective, to some extent, in illuminating aspects of his understanding of friendship. It is suggested that more such innovative and activity based approaches may be useful in future in including the views of children with autism in research, especially in relation to those with additional learning disabilities.

Limitations associated with this study include an important recognition that findings from individual case studies cannot be generalised in any straightforward way to other situations (Bryman, 2012). However, it is agreed that case studies are useful in developing knowledge and understanding in areas where data cannot easily be gathered through other types of research design (Bolte, 2014, Yin, 2011) and the exploration of friendship and children with autism and learning disabilities has been acknowledged as such an area (Petrina et al., 2014). In addition, although the verification of Ben's friendship nominations by key adults testified to the likely existence of preferred friendship relationships from Ben's point of view, the perceptions of those children named by Ben as his friends were not sought. Since mutuality is fundamental to the concept of friendship (Bauminger et al., 2008), such perceptions are important and would have contributed to a more in-depth understanding of Ben's peer relationships.

In its focus on the friendship capabilities of a child with autism and learning disabilities, this study hopes to contribute to a "capacity perspective" by highlighting what children with autism and learning disabilities can achieve in terms of peer social relationships. A more detailed utilisation of Hinde's conceptual categories may well reveal further valuable insights regarding aspects of the capabilities of people with autism to engage in friendships. Additional research in the area of friendship formation and retention among children with autism is also needed to inform practitioners about the kinds of environments and pedagogical supports that may facilitate these important relationships, acknowledged as vital to the on-going social and psycho-emotional well-being of all children.

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## References

Adler, P. A., & Adler, P. (1998). *Peer power: preadolescent culture and identity.* New Brunswick, NJ: Rutgers University Press.

Alderson P. (2005). Designing ethical research with children. In: A. Farrell (Ed.), *Ethical research with children* (pp. 27 – 36). Maidenhead: Open University Press.

American Psychiatric Association (APA) (2013). *Diagnostic and Statistical Manual of Mental Disorders*, 5th edn. Arlington, VA: American Psychiatric Publishing.

Baron - Cohen, S. (1995). *Mindblindness: An essay on autism and theory of mind.* London: Bradford.

Bauminger, N., Solomon, M., Aviezer, A., Heung, K., Brown, J., & Rogers, S. J. (2008). Friendship in high - functioning children with autism spectrum disorder: Mixed and non-mixed dyads, *Journal of Autism and Developmental Disorders* 38, 1211–1229.

Bauminger, N., & Shulman, C. (2003). The development and maintenance of friendship in high-functioning children with autism: Maternal perceptions, *Autism,* 7, 81–97.

Bauminger, N., & Kasari, C. (2000). Loneliness and friendship in high-functioning children with autism, *Child Development* 71, 447–456.

Beresford, B. (1997). *Personal accounts: Involving disabled children in research*. Social Policy Research Unit: York.

Berke, L. E. (1994). *Child Development.* London: Allyn and Bacon.

Bigelow, B. J. (1977). Children's friendship expectations: A cognitive developmental study. *Child Development*, 48, 246–253.

Bigelow, B. J., & LaGalpa, J. (1980). Children's written descriptions of friendship: A multidimensional analysis, *Developmental Psychology,* 11, 857-858.

Blair, B.L., Perry, N.B., O'Brien, M., Calkins, S.D., Keane, S.P. & Shanahan, L. (2014). The indirect effects of maternal emotion socialization on friendship quality in middle childhood, *Developmental Psychology*, 50, 566–576.

Blood, G. W., Blood, I.M., Coniglio, A. D., Finke, E.H. and Boyle, M.P. (2013). Familiarity breeds support: speech-language pathologists' perceptions of bullying of students with autism spectrum disorders, *J. Commun. Disord*, 46, 169–180.

Bölte, S. (2014). The power of words: Is qualitative research as important as quantitative research in the study of autism? *Autism,* 18, 67–68.

Booth, W. & Booth, T. (1993). Accentuate the positive: a personal profile of a parent with learning difficulties, *Disability, Handicap and Society,* 8, 4: 377-378.

Boyd, D.R. & Bee, H.L. (2013). *The developing child*. London: Pearson.

Boyden, P., Muniz, M. & Laxton - Kane, M. (2013). Listening to the views of children with intellectual disabilities: An evaluation of an intellectual disability CAMHS service, *J. Intellect. Disabil*., 17, 1: 51-63.

Bryman, A. (2012). *Social Research Methods,* 4th edn. Oxford: OUP.

Calder, L., Hill, V. & Pellicano, E. (2012). ˜Sometimes I want to play by myself": Understanding what friendship means to children with autism in mainstream primary schools, *Autism,* 17, 296–316.

Cappadocia, M., Weiss, J., & Pepler, D. (2012). Bullying experiences among children and youth with autism spectrum disorders, *J. Autism Dev. Disord.* 42, 266–277.

Carrington, S., Templeton, E., & Papinczak, T. (2003). Adolescents with Asperger syndrome and perceptions of friendship, *Focus on Autism & Other Developmental Disabilities*, 18, 211–218.

Causton-Theoharis, J., Ashby, C., & Cosier, M. (2009). Islands of loneliness: Exploring social interaction through the autobiographies of individuals with autism, *Intellectual and Developmental Disabilities,* 47, 84–96.

Chamberlain, B., Kasari, C. & Rotheram - Fuller, E. (2007). Involvement or isolation? The social networks of children with autism in regular classrooms, *Journal of Autism and Developmental Disorders,* 37, 230–242.

Cohen, L., and Manion, L. (2011). *Research methods in education.* (7th edn) London: Routledge.

Daniel, L.S., & Billingsley, B. S. (2010). What boys with an autism spectrum disorder say about establishing and maintaining friendships, *Focus on Autism and Other Developmental Disabilities*, 25: 220–229.

Dunn, J. (2004). *Children's friendships: the beginnings of intimacy*. Blackwell: Malden, MA.

Franklin, A. & Sloper, P. (2009). Supporting the participation of disabled children and young people in decision-making, *Child. Soc*., 23, 3–15.

Fuentes, J., Bakare, M., Munir, K., Aguayo, P., Gaddour, N. & Oner, O. (2012). Autism spectrum disorders. In J.M. Rey (Ed.), *IACAPAP e-text book of child and adolescent mental health* (pp. 1–27). Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions.

Harwood, R., Miller, S.A., and Vasta, R. (2008). Child psychology: development in a changing society. John Wiley & Sons: Hoboken, NJ.

Hinde, R. A. (1979). *Towards understanding relationships.* New York: Academic Press.

Hobson, R.P. (1993). *Autism and the development of mind.* Hove: LEA.

Howard, B., Cohn, E. & Orsmond, G.I. (2006). Understanding and negotiating friendships, *Autism*, 10, 619–627.

Humphrey, N. & Lewis, S. (2008). `Make me normal', *Autism* 12, 23–46.

Hurley - Geffner, C. M. (1995). Friendships between Children with and without Disabilities. In R. L. Koegel and L. Kern Koegel (Eds.), *Teaching children with autism: strategies for initiating positive interactions and improving learning opportunities.* Baltimore: Paul Brookes.

James, A., Jenks, C. and Prout, A. (1998). *Theorizing childhood*. Polity Press: Cambridge.

Jordan, R., and Powell, S. (1995). *Understanding and teaching children with autism.* London: Wiley.

Kasari, C., Locke, J., Gulsrud, A. & Rotheram-Fuller, E. (2011). Social networks and friendships at school: comparing children with and without ASD, *J. Autism Dev. Disord*., 41, 533–544.

Kilman, B. and Negri-Shoultz, N. (1987). Developing educational programs for working with students with Kanner's Autism. In D. Cohen, A. Donnellan and R. Paul (Eds.), *Handbook of autism and pervasive developmental disorders.* New York: Wiley.

Kuo, M.H., Orsmond, G.I., Cohn, E.S. & Coster, W.J. (2013). Friendship characteristics and activity patterns of adolescents with an autism spectrum disorder, *Autism,* 17: 481–500.

Lasgaard, M., Nielsen, A., Eriksen, M. & Goossens, L. (2010). Loneliness and social support in adolescent boys with autism spectrum disorders, *Journal of Autism and Developmental Disorders,* 40, 218–226.

Locke, J., Ishijima, E.H., Kasari, C. & London, N. (2010). Loneliness, friendship quality and the social networks of adolescents with high-functioning autism in an inclusive school setting, *Journal of Research in Special Educational Needs,* 10, 74–81.

Mazurek, M.O. (2013). Loneliness, friendship, and well-being in adults with autism spectrum disorders, *Autism,* 1-10.

McDonald, N. & Messinger, D. (2012). Empathic Responding in Toddlers at Risk for an Autism Spectrum Disorder, *J. Autism Dev. Disord*., 42, 1566–1573.

Miltenberger, C. & Charlop, M. (2014). Increasing the athletic group play of children with autism, *J. Autism Dev. Disord*., 44, 41–54.

Mussen, P.H., Janeway Conger, J., Kagan, J. and Huston, A.C. (1990) *Child development and personality.* New York: HarperCollins.

Penney, S.C., (2013). Qualitative investigation of school-related issues affecting individuals diagnosed with autism spectrum disorder and co-occurring anxiety and/or depression, *Autism Insights,* 75–93.

Petrina, N, Carter, M & Stephenson, J. (2014). The nature of friendship in children with autism spectrum disorders: A systematic review. *Research in Autism Spectrum Disorders*, *8*(2), 111–126.

Rabaglietti, E., Vacirca, M., Zucchetti, G. & Ciairano, S. (2012). Similarity, cohesion, and friendship networks among boys and girls: a one-year follow-up study among Italian children, *Curr. Psychol*, 31, 246–262.

Rabiee, P., Sloper, P. & Beresford, B. (2005). Doing research with children and young people who do not use speech for communication, *Child. Soc*, 19, 385–396.

Robson, R. (2011). *Real World Research.* (3rd edn). Oxford: Blackwell.

Rose, A.J. & Rudolph, K.D. (2006). A review of sex differences in peer relationship processes: Potential trade-offs for the emotional and behavioral development of girls and boys, *Psychol. Bull.,* 132, 98–131.

Rossetti, Z.S. (2011). ‘‘That’s how we do it’’: Friendship work between high school students with and without autism or developmental disability, *Research and Practice for Persons with Severe Disabilities,* 36, 23–33.

Rutter, M and Rutter, M. (1992). *Developing minds.* London: Penguin

Schopler, E., Reichler, R. J., Bashford, A., Lansing, M. D., and Marcus, L. M. (1990). *Psychoeducational Profile Revised,* Austin, TX: Pro-Ed.

Smith, P. K. (1994). Social development. In B. E. Bryant A. M. and Colman (Eds.), *Developmental psychology*. London: Longman.

Solomon, M., Bauminger, N. & Rogers, S. J. (2011). Abstract reasoning and friendship in high functioning preadolescents with Autism Spectrum Disorders, *Journal of Autism and Developmental Disorders,* 41, 32–43.

Stalker, K., and Connors, C. (2002). *The views and experiences of disabled children and their siblings: implications for practice and policy*. Jessica Kingsley Press: London.

Strauss, A., and Corbin, J. (1990). *Basics of qualitative research.* London: Sage.

Teachman, G., Gibson, B.E. (2013). Children and youth with disabilities: innovative mMethods for single qualitative interviews, *Qual. Health Res*., 23, 264–274.

Vasta, R., Haith, M.M. and Miller, S.A. (1992), *Child psychology: the modern science.* Chichester: John Wiley & Sons.

Webster, A. & Carter, M. (2013). Mutual liking, enjoyment, and shared interactions in the children with autism closest relationships between children with developmental disabilities and peers in inclusive school settings, *Phys. Disabil*., 25, 373–393.

Witkow, M.R. & Fuligni, A. J. (2010). In-school versus out-of-school friendships and academic achievement among an ethnically diverse sample of adolescents, *J. Res. Adolesc*., 20, 3, 631-650.

Wing, L. (1992). Manifestations of social problems in high-functioning autistic people. In E. Schopler and G. Mesibov (Eds.). *High-functioning individuals with autism.* New York: Plenum.